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(54) Title: METHODS FOR CONTROLLING PATHOLOGICAL ANGIOGENESIS BY INHIBITION OF $\alpha 6 \beta 4$ INTEGRIN

(57) Abstract: It has now been determined that $\alpha 6 \beta 4$ integrin is a pro-angiogenic receptor, and thus that it provides a novel and heretofore unrecognized target for anti-angiogenic therapy. Thus, angiogenesis, particularly pathological angiogenesis, can be inhibited, and conditions with which pathological angiogenesis is associated treated using inhibitors of $\alpha 6 \beta 4$ integrin. A tissue in which angiogenesis is to be inhibited is exposed to a therapeutic agent effective to reduce the amount of active $\alpha 6 \beta 4$ integrin in the tissue. The tissue may be within a patient, and in particular a human patient, to be treated for a disease condition with which pathological angiogenesis is associated. The therapeutic agent may be an antibody or a small molecule, for example a laminin-5 analog, which binds to $\alpha 6 \beta 4$ integrin and inhibits its normal function. The therapeutic agent may also be a chemical species that interferes with the production of $\alpha 6 \beta 4$ integrin, including for example an antisense or RNAi species.

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